

# TetraMAX(R)

Version 0-2018.06-SP1 for linux64 - Jul 19, 2018

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Tcl mode is on by default. Use -notcl to run in native mode.

Executing startup file

"/proj/cad/synopsys/synopsys\_2018/tmax\_v0-2018.06-SP1/admin/setup/tmaxtcl.rc".

BUILD-T> read\_netlist /home/011/y/yx/yxa210024/spring23/testing/src\_ver/gtech\_lib.v

Begin reading netlist (

/home/011/y/yx/yxa210024/spring23/testing/src\_ver/gtech\_lib.v )...

Warning: Rule N2 (unsupported construct) was violated 10 times.

End parsing Verilog file

/home/011/y/yx/yxa210024/spring23/testing/src\_ver/gtech\_lib.v with 0 errors.

End reading netlist: #modules=106, top=GTECH\_ZERO, #lines=1976, CPU\_time=0.00 sec, Memory=0MB

BUILD-T> read\_netlist /home/011/y/yx/yxa210024/Q1\_project6\_combinational\_1.v

Begin reading netlist (

/home/011/y/yx/yxa210024/Q1\_project6\_combinational\_1.v )...

End parsing Verilog file /home/011/y/yx/yxa210024/Q1\_project6\_combinational\_1.v with 0 errors.

End reading netlist: #modules=1, top=Q1\_project6\_combinational\_1, #lines=20, CPU\_time=0.00 sec, Memory=0MB

BUILD-T> run\_build\_model Q1\_project6\_combinational\_1

-----  
Begin build model for topcut = Q1\_project6\_combinational\_1 ...

-----  
There were 2 primitives and 0 faultable pins removed during model optimizations  
End build model: #primitives=12, CPU\_time=0.00 sec, Memory=0MB

-----  
Begin learning analyses...

End learning analyses, total learning CPU time=0.01 sec.  
-----

DRC-T> run\_drc

-----  
Begin scan design rules checking...

-----  
Begin simulating test protocol procedures...

Test protocol simulation completed, CPU time=0.00 sec.  
-----

Begin scan chain operation checking...

Scan chain operation checking completed, CPU time=0.00 sec.  
-----

Begin nonscan rules checking...

Nonscan cell summary: #DFF=0 #DLAT=0 #RAM\_outs=0 tla\_usage\_type=none

Nonscan rules checking completed, CPU time=0.00 sec.  
-----

Begin DRC dependent learning...

Fast-sequential depth results: control=0(0), observe=0(0), detect=0(0), CPU time=0.00 sec

DRC dependent learning completed, CPU time=0.00 sec.

-----  
DRC Summary Report  
-----

No violations occurred during DRC process.  
Design rules checking was successful, total CPU time=0.00 sec.  
-----

TEST-T> remove\_faults -all

0 faults were removed from the fault list.

TEST-T> add\_faults -all

40 faults were added to fault list.

TEST-T> run\_atpg -ndetects 1

ATPG performed for stuck fault model using internal pattern source.

-----  
#patterns        #faults        #ATPG faults    test        process  
stored        detect/active    red/au/abort    coverage    CPU time  
-----  
Begin deterministic ATPG: #uncollapsed\_faults=40, abort\_limit=10...  
5                40        0            0/0/0        100.00%        0.00  
-----

Uncollapsed Stuck Fault Summary Report  
-----

fault class	code	#faults
Detected	DT	40
Possibly detected	PT	0
Undetectable	UD	0
ATPG untestable	AU	0
Not detected	ND	0
total faults		40
test coverage		100.00%

-----

Pattern Summary Report  
-----

#internal patterns	5
#basic_scan patterns	5

-----

TEST-T> report\_faults -all

sa0	DS	Y1
sa0	--	U6/Z
sa0	--	U6/A
sa0	--	U6/B
sa0	--	x1
sa0	--	U7/Z
sa1	DS	x1
sa1	--	U6/A
sa1	DS	Y1
sa1	--	U6/Z
sa1	DS	U7/Z
sa1	--	U7/C
sa1	--	U8/Z
sa0	--	U8/A
sa1	--	U6/B
sa0	DS	U7/A
sa0	--	U7/B
sa1	DS	U7/A
sa1	DS	U7/B
sa0	DS	U8/Z

```
sa1    --    U8/A
sa0    --    U7/C
sa0    DS    y1
sa1    DS    y1
sa0    DS    y2
sa1    DS    y2
sa0    DS    U9/Z
sa1    DS    U9/Z
sa1    --    U9/A
sa0    --    U9/B
sa0    --    U10/Z
sa1    --    U10/A
sa0    DS    U9/A
sa1    DS    U10/Z
sa0    --    U10/A
sa1    --    U9/B
sa0    DS    z
sa1    DS    z
sa0    DS    Y2
sa1    DS    Y2
```

```
TEST-T> report_patterns -all -internal
```

```
Pattern 0 (basic_scan)
```

```
Time 0: force_all_pis = 111
```

```
Time 1: measure_all_pos = 111
```

```
Pattern 1 (basic_scan)
```

```
Time 0: force_all_pis = 100
```

```
Time 1: measure_all_pos = 010
```

```
Pattern 2 (basic_scan)
```

```
Time 0: force_all_pis = 110
```

```
Time 1: measure_all_pos = 101
```

```
Pattern 3 (basic_scan)
```

```
Time 0: force_all_pis = 101
```

```
Time 1: measure_all_pos = 100
```

```
Pattern 4 (basic_scan)
```

```
Time 0: force_all_pis = 000
```

```
Time 1: measure_all_pos = 000
```

```
TEST-T>
```